

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

**Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

**1. General Description of Data to be Managed****1.1. Name of the Data, data collection Project, or data-producing Program:**

2008 US Army Corps of Engineers (USACE) National Coastal Mapping Program (NCMP)  
Topobathy Lidar - Indiana (Lake Michigan shoreline)

**1.2. Summary description of the data:**

The data contained in these files contain topographic data collected by the CHARTS system along Lake Michigan, Indiana. The data are broken into boxes. The box layout index is provided by the shape file, "in\_boxes.shp", and the box numbers for labels are in the "Box" field of the shape file. The data file names are based on the year, project, area name, box number, and product type. An example of the file name is "2008\_NCMP\_IN\_Michigan\_07\_02DS08070\_006\_080916\_1955\_A\_00452.las." The 14th digit within the file name corresponds with the box names used. The data was collected and processed in geographic coordinates and ellipsoid heights. The positions are relative to NAD83 in decimal degrees of longitude and latitude. The heights were converted from ellipsoid to orthometric heights using the Geoid03 model with the results in meters. The date and time of each point are also MM:SS.SSSSSS. The format of the file is LAS version 1.0

Original contact information:

Contact Org: JALBTCX

Title: Data Production Manager

Phone: 228-252-1111

Email: shoals-info@sam.usace.army.mil

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

One-time data collection

**1.4. Actual or planned temporal coverage of the data:**

2008-09-17 to 2008-09-26

**1.5. Actual or planned geographic coverage of the data:**

W: -87.5516, E: -86.8243, N: 41.7774, S: 41.5835

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:****1.8.1. If data are from another observing system, please specify:****2. Point of Contact for this Data Management Plan (author or maintainer)****2.1. Name:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.4. E-mail address:**

coastal.info@noaa.gov

**2.5. Phone number:**

(843) 740-1202

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:****3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?**

**4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):**

**5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

**5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):*

**Process Steps:**

- 2009-01-01 00:00:00 - These data were collected using the CHARTS surveys system. It is owned by the Naval Oceanographic Office and Operated through contract. The system collects topographic lidar data at 20kHz and hydrographic data at 3kHz. The system also collects RGB imagery at 1Hz. A CASI-1500 hyperspectral line scanner is integrated with the system as well. Aircraft position, velocity and acceleration information are collected through a combination of Novatel and POS A/V equipment. Raw data are collected and transferred to the office for downloading and processing in SHOALS GCS software. GPS data are processed using POSpac software and the results are combined with the lidar data to produce 3-D positions for each lidar shot. These data are edited using Fledermaus software where anomalous data are removed from the dataset. The edited data are written to 5 km tiles along the shoreline using chartsLAS, a program written by NAVO. This program reads data from the original binary format files and produces separate ASCII files for first and last return data. The data are converted from ellipsoid to orthometric heights, based on the GEOID03 model, within the chartsLAS program.
- 2011-05-01 00:00:00 - The NOAA Office for Coastal Management (OCM) received the data as unclassified files in ASCII format. The files contained LiDAR intensity and elevation measurements. OCM performed the following processing on the data for data storage and Digital Coast provisioning: 1. The data were converted from ASCII to las format. 2. The data were classified as 1 for the topo data (no bare earth) using the topo last (TL) elevation and 11 for the hydro data. 3. The data were converted from NAVD88 heights to ellipsoid heights using Geoid03. 4. The LAS header fields were sorted by latitude and updated.
- 2014-01-09 00:00:00 - Times had originally been stored as POSIX seconds when converted to LAS. This was switched to adjusted GPS time (GPS seconds - 1e9) to conform to the LAS 1.2 standard.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

**5.2. Quality control procedures employed (describe or provide URL of description):**

## 6. Data Documentation

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

### 6.1. Does metadata comply with EDMC Data Documentation directive?

No

#### 6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.6. Type(s) of data
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

### 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

#### 6.2.1. If service is needed for metadata hosting, please indicate:

### 6.3. URL of metadata folder or data catalog, if known:

<https://www.fisheries.noaa.gov/inport/item/50069>

### 6.4. Process for producing and maintaining metadata

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: [https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-Data\\_Documentation\\_v1.pdf](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

## 7. Data Access

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable*

*information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

**7.1. Do these data comply with the Data Access directive?**

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

**7.2. Name of organization of facility providing data access:**

NOAA Office for Coastal Management (NOAA/OCM)

**7.2.1. If data hosting service is needed, please indicate:**

**7.2.2. URL of data access service, if known:**

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=588>

[https://coast.noaa.gov/htdata/lidar4\\_z/geoid18/data/588](https://coast.noaa.gov/htdata/lidar4_z/geoid18/data/588)

**7.3. Data access methods or services offered:**

This data can be obtained on-line at the following URL: <https://coast.noaa.gov/dataviewer/>;

**7.4. Approximate delay between data collection and dissemination:**

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

**8. Data Preservation and Protection**

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

**8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

**8.1.1. If World Data Center or Other, specify:**

**8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

**8.2. Data storage facility prior to being sent to an archive facility (if any):**

Office for Coastal Management - Charleston, SC

**8.3. Approximate delay between data collection and submission to an archive facility:**

**8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

**9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*